

DOCUMENT RESUME

ED 026 940

HE 000 236

By-Benson, Charles S.

The Effects of Federal Support on Allocation of Campus Resources.

California Univ., Berkeley. Center for Research and Development in Higher Education.; Western Interstate Commission for Higher Education, Boulder, Colo.

Pub Date Nov 66

Note-26p.; Paper presented at 8th Annual College Self-Study Institute, University of California, Berkeley, July 11-14, 1966, "Campus and Capitol."

EDRS Price MF-\$0.25 HC-\$1.40

Descriptors-\*Educational Finance, \*Federal Aid, \*Federal Programs, \*Higher Education, Scientific Research

In its involvement with higher education, the federal government has followed a policy of building on strength. As late as 1964, 85% of federal funds for higher education were allocated for organized research. In 1962, 95% of research funds were devoted to work in the physical and life sciences. Federal monies are also highly concentrated geographically and are distributed in ways that allow large numbers of graduate students to devote full time developing research skills. Some of the sources of inefficiency in higher education are: poor quality of faculty, the teaching and learning of wrong things, neglect of undergraduate education, neglect of the poorer states and their gifted students. Federal involvement has helped to improve the quality of teaching but has not had a beneficial effect on the other sources of inefficiency. One solution might be to provide the states with block grants to strengthen all higher education within their borders. The states, however, would still be responsible for accounting for the use of funds and evaluating the success of federally funded programs. An annotated bibliography is included. (JS)

EDO 26940

THE EFFECTS OF FEDERAL SUPPORT ON  
ALLOCATION OF CAMPUS RESOURCES

by

Charles S. Benson  
Associate Professor  
of Education  
University of California  
Berkeley, California

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE  
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE  
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION  
POSITION OR POLICY.

HE 000 236

# Chapter 5

## The Effects of Federal Support on Allocation of Campus Resources

by  
*Charles S. Benson*  
*Associate Professor*  
*of Education*  
*University of California*  
*Berkeley, California*

### The Concentration of Federal Funds

The first observation I would make about federal involvement in campus affairs is that our central government has rather consistently followed a policy of building on strength. As late as fiscal 1964, so the Office of Education reports, 85 percent of federal funds for higher education were disbursed for organized research.<sup>1</sup> In fiscal 1962, 95 percent of federal research funds in educational institutions were devoted to work in the physical and life sciences.<sup>2</sup> Ever since the time of Benjamin Franklin, our country has been regarded as one that valued a rather peculiar combination of pure and applied research in scientific fields: pure research is fine if a certain amount of it is sure to lead to practical applications; applied research is all right, too, as long as a certain amount of it does more to better the human condition than add to the profits of manufacturers.

Not only are federal disbursements in line with a long-standing American technological tradition, but they are also highly concentrated. In 1961-62, the following states received 66 percent of federal payments toward the current fund income of institutions of higher education: California, Illinois, Maryland, Massachusetts, Michigan, New York, and Pennsylvania.<sup>3</sup> (I refer to "total" federal

disbursements, not just to payments in support of organized research.) Each of these seven states is known to have at least one major, nationally regarded institution of higher education, or an institution that can be described as a "university" in the highest sense. Each of the seven is in the top quarter of states with regard to personal income per capita, which is to say that all of the seven are rich. Among them they accounted for 43 percent of degree credit enrollment, obviously a smaller proportion than their share of grants represents. In contrast, thirteen poor states, Alabama, Arkansas, Florida, Georgia, Kentucky, Maine, Mississippi, North Carolina, North Dakota, South Carolina, South Dakota, Tennessee, and West Virginia, had 14 percent of the nation's enrollment and received 7 percent of the federal contribution toward current fund income. Federal programs, including those in lower education, ordinarily provide more dollars proportionately in the poor states than the rich. Federal participation in higher education is an exception.

Not only is federal money concentrated both with respect to subject fields and geographically; it is distributed in ways that allow large numbers of graduate students to devote their full energies to developing their research skills. This period of full-time research training ordinarily occurs in the life of the student when he is in his early twenties, that time, apparently, when he is most likely to have great amounts of energy to acquire these kinds of new capacities. What I refer to, of course, is the project system of grants and the support by the government of major research centers and national laboratories. Such subventions lead to the employment of large numbers of research assistants. It is perhaps interesting to note the contrast on this point between two institutions that are heavily involved in federal research grants and two that are not strongly involved. It is reported that, in 1962-63, there were 2,100 part-time positions in organized research at the University of California and 411 at Cornell. On the other hand, there were only ten at the University of Kentucky and fifty-two at the University of Maine.<sup>4</sup>

In World War II the government had the most urgent need for scientific research, and it naturally turned to the strongest institutions to get it. From the point of view of the development of higher education in the U.S., has necessity now become virtue? It is my feeling that there is more to be said for the present system than

against it. However, I would like to suggest some trouble spots in due course.

### **Inadequacy in Quality of Faculty**

Let us begin in rather general terms. What are some possible sources of inefficiency in American higher education? One might be inadequacy in quality of faculty. That is, under a social welfare function, the country as a whole might be "better off" if the colleges and universities of the land were staffed by people of greater abilities than is presently the case. I know of no way to express quantitatively the relation between quality of faculty and some kind of index of national welfare, but I am willing to assume that higher education occupies a strategic position in promoting national welfare and that improvement in calibre of faculty is thus an appropriate goal of national policy. Has federal subvention of higher education had favorable effects on this score? I think the answer is clearly positive. By concentrating funds by field and institution, the government made it practically certain that some faculty members would appear as Bunyan-like figures, men larger than life, men holding, indeed, the fate of their fellow creatures in their hands. Not only has status of the professional life been enhanced almost beyond measure, but so also have financial rewards been raised. This latter has happened more quickly (in terms of total earned income) in some fields (science, engineering, medicine, economics) than in others, but in academic life money does rub off. The creation of a moneyed elite in the university has benefited the pocketbooks of us all.

### **Teaching the Wrong Things**

A second source of inefficiency would be for the faculty (as a group) to teach the wrong things and, similarly, for the students (as a group) to study the wrong things. I cannot see that federal aid to higher education has had much noticeable effect on these matters. In spite of the concentration of federal money in scientific and medical fields, we do not appear to be burdened with a surplus of scientists, engineers, or doctors. In Harold Orlans' book, *The Effects of Federal Programs on Higher Education*, the case is made that there has been little shift in the academic abilities of students who major in the sciences as compared with those who choose humanities.<sup>5</sup> What we may have been doing is simply exploiting the talents of the scientifically inclined more completely.

Further, I suspect that the federal grants have spilled over into the humanities, though I cannot give a quantitative estimate of the amount. Insofar as this has happened, and assuming that most young people do not have a completely open choice between, say, physics and literature, the humanistic faculties in the great universities have moved in a better position to attract the most promising students and help develop their abilities.

The argument about spill-over is commonly cast in the following terms. Assume that the receiving institution has a priority schedule of programs and projects for its next year's budget. Assume further that the institution faces budgetary constraint; that is, the institution on its own resources is unable to fund all the programs or projects it considers desirable. Suppose the programs (let us stick with just that designation) are listed  $x_1, x_2, x_3, \dots$ , and that the university decides it can support proposals for spending through  $x_n$ . Now, let the institution receive additional federal grants. It is likely that this money will support at least some of the  $x_1$  to  $x_n$  spending proposals. Insofar as it does so, the university can then expand its next year's budget to include  $x_{n+1}, x_{n+2}$ , etc. Indeed, it has been suggested that the federal government should acquaint itself with these kinds of secondary effects of its grant programs.<sup>6</sup>

Under this sort of argument, it is at times when the rate of expansion in federal support of the sciences is slackening—or when, as now, the volume of federal research funds appears to be in absolute decline—that the humanities suffer most. To state otherwise is to assume that the universities stand in the same relationship to the federal government that a private, profit-making research organization does. That is, a relationship under which there is a precise dollar-for-dollar connection between the federal contribution and the amount of scientific activity supplied.

#### **Devaluing Undergraduate Teaching**

Education, however, can also be inefficient if the quality of instruction is inappropriate for the learning requirements of students or if the milieu of instruction is unaccepting of their condition. I feel these are serious problems at the undergraduate level and that the federal government is partly to blame. As I shall suggest later, it seems that appropriate corrective action can most properly be taken in the public sector.

It is a matter of common agreement that federal emphasis on research, particularly research in the "hard" subject fields, has served to devalue undergraduate teaching. What are the particular functions of undergraduate teaching? The successful lecturer will raise the motivations of the students in his audience. In what at Princeton are called preceptorials, the student engages the preceptor and his fellow students in discourse, partly for the fun of it and partly because the testing of ideas among peers sharpens one's capacity to think. The "section" provides a chance for the leader, commonly a TA, to help students over the rough spots in a course by patient, detailed explanations. For whom are these functions important? I suspect they are extremely important for the student from a non-college family. It is he who needs the stimulation of the outstanding lecturer; it is he who can most urgently use the self-confidence a good preceptorial can engender; it is he who can stand or fail on the help he gets from a section man.

I say these things apply on the average, and they apply because the non-college household will supply less intellectual nourishment than professional households. That is, the student from the non-college household has a smaller stock of intellectual resources, as distinct from talent, from which he can draw to become a self-sustaining member (in this case, student member) of the academic community. Worse, the students from non-college households typically attend poorer elementary and secondary schools than do children from professional families. It should be recognized that our institutions of higher education are superimposed on a system of lower education characterized by shocking inequalities of provision. Thus, when federal research expenditures abet the devaluing of undergraduate teaching, those who suffer are the same persons who have been poorly served in the ordinary public schools. Thus, there is a glaring inconsistency between the Elementary and Secondary Education Act of 1965, under which strenuous efforts are being made to improve the school opportunities for the children of the economically disadvantaged, and the generally-acknowledged implication about adverse effects of past federal higher education programs on undergraduate teaching.

It seems to me, finally, that the problem of undergraduate teaching is particularly acute in the great universities. This, after all, is where the government has concentrated its money. I feel

that in such institutions the problem can be ameliorated, but not to the extent that it disappears as a problem.

There is also the matter of universities in the poorer states. Here, a few figures may be in order. Educational expenditures for students in 1961-62 varied from under \$1,000 (Arizona, Oklahoma, Texas) to over \$2,300 (Massachusetts, and excluding the usual "unusual" figure for Alaska), or by a factor of 2.3 to 1. Expenditures in instruction and departmental research had a smaller variation: the largest was about 1.6 times the smallest. The explanation, or at least a possible explanation, goes like this: large expenditures per student imply substantial amounts of federal money for research.

These monies are correlated with the existence of large graduate schools. The graduate schools supply teaching assistants to keep costs of undergraduate instruction in check. In 1962-63 at the University of California there was one part-time professional position for each 1.3 full-time persons and at Cornell, the number of part-time posts exceeded the full-time. At the University of Kentucky, on the other hand, there was one part-time person for each 8.7 full-time and at Maine, one part-time for each 4.8 full-time.

The great universities have developed a means to control undergraduate teaching costs and they also had, of course, large and varied financial resources before the period of federal intervention. Naturally enough, they pay high salaries for top-grade faculty, and they get a large share of the professional talent in the country. They also provide, in relatively handsome measure, auxiliary services. At the University of California in 1962-63 there was one professional librarian per 115 resident undergraduates; at Cornell the figure was one per 80 undergraduates. At the University of Kentucky it was one per 148 students and at the University of Maine, one per 396.

#### **The Poorer States and Gifted Students**

In Maine, the very bright mobile student will seek to go to a major university on the outside. But having lived in the state, I know that many students are too isolated economically, socially, and intellectually to attend an institution outside Maine. By the laws of probability this group contains some very bright students. But the institutions available to them are short of top-rated faculty,

deficient in auxiliary services, and bled of a due proportion of outstanding students (from whom other outstanding students ordinarily learn so much).

Now, it can be claimed that these two problems, the problem of the average-appearing, though possibly gifted undergraduate at the major university and the problem of the gifted but intellectually starved undergraduate in the isolated, poor state, are not really serious ones. I feel, however, that our society is rich enough to afford an even more complete search for talent and, secondly, that where the search is already rather broad-based, it is socially eroding for a person to make the effort to get in to college and then find that in spite of his efforts he does not "fit in." With respect to state universities like Maine, one might argue that the institution should not strive to be a university. Unless it is, however, it cannot serve the brightest students. Further, the research and cultural opportunities a university provides promote the economic growth of the area, which is a point commonly advanced in support of the efforts of underdeveloped countries to establish universities.<sup>7</sup>

More federal money in forms other than research expenditures would be a help, and, indeed, we are told that federal support, other than for research, was to rise from \$1.9 billion in 1965 to \$2.5 billion in 1966.<sup>8</sup> However, it is appropriate to recall Alice Rivlin's observations (*The Role of the Federal Government in Financing Higher Education*) that major federal aid for institutional support is inherently wasteful (the federal government is less able than the states to distinguish among institutions with respect to quality) and is likely to lead to conditions on block grants that are seriously damaging to institutional autonomy.<sup>9</sup>

#### **One Solution: Block Grants**

I think the answer to the problems I have raised here is federal money—but not earmarked federal aid to higher education. With the exception of Massachusetts, I am impressed that those very states that have well-financed state governments are at the same time the ones that have first-rate institutions of higher education. Thus, the important thing to do may be to use the revenue-raising power of the federal government to augment the financial resources of the state governments—through block grants, perhaps, under a Heller-type proposal.<sup>10</sup> In states that already have a strong university, the money—higher education's share of it—could be used to

develop teaching institutions such as state colleges and junior colleges. In states that presently have a weak university system, the money could go for salaries, libraries, etc., in the university, but also for institutes, the type of expenditure that the legislative analyst in California refers to as "seed money" to build research strength and ultimately to attract federal grants.<sup>11</sup> Where the university in a state is necessarily small, it would seem appropriate to specialize in the research function, and the institute offers an appropriate means toward this end. It might also be appropriate to use some undergraduates as research assistants in the smaller universities.

#### **Demands of the Government Auditor**

As a last point, there is another type of inefficiency with which universities can be plagued: excessively detailed and sometimes spurious efforts to meet the demands of government auditors, all this to serve the end of public control of federal aid to higher education. I think we might all agree with Dean Price of Harvard that federal grants should be somewhat more broad-based than they generally are under the project system.<sup>12</sup> It is possible that the research and development centers established by the U.S. Office of Education could serve as a model in this regard. William Bowen of Princeton, in his comparative study of U.S. and British universities, reached the same conclusion, namely, that less restrictive types of grants would serve the cause of institutional autonomy in the American university.<sup>13</sup>

I would go further and also suggest that Dean Price is right when he holds that the federal civil service should have greater influence than it now does in making grants. My acquaintance with departmental officials and my reservations about the functioning of the committee system, at least in the field of education, lead me to this conclusion. However, as a corollary both to broader-based grants and to reliance on departmental judgments in making awards, it seems appropriate that universities move ahead with their efforts to establish better systems of program accounts. After the fact, it will still be necessary to show *in general* what the federal money has bought. Before the fact, program accounting helps to show departmental officials *in general* what the money is likely to buy and what the opportunity costs of the institutional resources are.

In conclusion, I would say that, though highly concentrated according to subject fields, particular states and economic regions, and to the advantage of graduate students, federal aid to higher education has been of tremendous benefit where it has been applied. It has played a major role particularly in strengthening faculties in those more fortunate states and institutions which have been primary recipients of aid.

There are gaps, nonetheless, in federal involvement in higher education, and I would question the failure of our universities and governing officials to identify the problems and apply solutions to them now. Federal aid has done little to convince faculty members and students alike to readjust themselves to teaching and learning more vital subjects than they now concentrate upon.

Federal aid has tended to devalue higher education at the undergraduate levels, thus compounding the inadequacies and inconsistencies already prevailing in our systems of elementary and secondary education. Government involvement has favored the already rich states over the poor states and further increased the disadvantages of students in those states, who for a variety of reasons must remain in their states to obtain a higher education.

These are a few of the areas untouched by the federal programs. They can be too easily dismissed as unimportant, but I think that we have the resources available now to get into them and to do something. One solution would be to give the states blocks of funds for higher education and let them put their experience and judgment to use in applying them fruitfully. That is one solution; there are others, and the time is here to find them.

<sup>1</sup>Office of Education, Preliminary Report of Financial Statistics of Institutions of Higher Education, Fiscal Year 1964, Based on a Sample of Institutions, Washington, Government Printing Office, July, 1964, p. 1.

<sup>2</sup>Special Sub-Committee on Education, Committee on Education and Labor, House of Representatives, *The Federal Government and Education*, Washington, Government Printing Office, 1963, p. 56.

<sup>3</sup>Office of Education, *Digest of Educational Statistics*, 1965 edition, Washington, Government Printing Office, 1965, pp. 98-99.

<sup>4</sup>These and other data about individual institutions are taken from Office of Education, *Statistics of Land-Grant Colleges and Universities, Year Ended June 30, 1963*, Washington, Government Printing Office, 1965, various tables.

<sup>5</sup>Harold Orlans, *The Effects of Federal Programs on Higher Education*, Washington, The Brookings Institution, 1962, p. 38 ff.

<sup>6</sup>H. W. Singer, "For Plans of Projects," *Economic Journal*, September, 1965.

<sup>7</sup>Frederick Harbison and Charles A. Myers, *Education, Manpower, and Economic Growth*, New York, McGraw-Hill Book Company, 1964, pp. 57-58.

<sup>8</sup>Committee on Labor and Public Welfare, U.S. Senate *Hearings on the Higher Education Act of 1965*, Washington, Government Printing Office, 1965, pp. 170-172.

<sup>9</sup>Alice M. Rivlin, *The Role of the Federal Government in Financing Higher Education*, Washington, The Brookings Institution, 1961, pp. 163-165.

<sup>10</sup>The proposal, commonly attributed to Walter W. Heller, professor of economics, University of Minnesota and formerly Chairman, Council of Economic Advisers, is that the federal government turn back to the states a share of the annual increase in its tax receipts, for the general use of the states.

<sup>11</sup>California Legislature, 1965 Regular Session, *Analysis of the Budget Bill of the State of California*, a Report of the Legislative Analyst to the Joint Legislative Budget Committee, Sacramento, California, Office of State Printing, 1965, pp. 321-322.

<sup>12</sup>Don K. Price, "Federal Money and University Research," *Science*, January 21, 1966, p. 288.

<sup>13</sup>William G. Bowen, *Economic Aspects of Education: Three Essays*, Princeton, Industrial Relations Section, 1964, p. 79 ff.

**See Section V in the back of this book  
for annotated bibliography of related materials.**

### Precis

#### The Effects of Federal Support on the Allocation of Campus Resources

Not only are federal disbursements in line with a long-standing American technological tradition, but they are also highly concentrated in other ways. As late as fiscal 1964, 85 percent of federal funds for higher education were disbursed for organized research. In fiscal 1962, 95 percent of federal research funds in educational institutions were devoted to work in the physical and life sciences.

Federal disbursements are highly concentrated geographically. In 1961-62, seven "rich" states received 66 percent of federal payments. They accounted for 43 percent of degree credit enrollment. Thirteen "poor" states received 7 percent of the federal contribution; they enrolled 14 percent of the nation's students. Federal money is also distributed in ways that allow large numbers of graduate students to devote full time developing research skills.

There is more to be said for the present system than against it. However there are some trouble spots. What are possible sources of inefficiency in American higher education? Some might be: inadequacy in quality of faculty; teaching or learning the wrong things; devaluing the education of undergraduates; and the plight of the poorer states and of their gifted students.

In asking whether federal involvement has helped cure the inadequacies in quality of teaching, the answer is clearly positive. One cannot be so positive in speaking of the effects of federal aid upon other sources of inefficiency.

One solution might be to provide the states with block grants to use in strengthening all higher education within their boundaries. The states, though, would still be responsible for accounting to the government for the manner in which the funds were spent and evaluating the success of those programs advanced with federal funds.

In World War II the government had the most urgent need for scientific research, and it naturally turned to the strongest institutions to get it. From the point of view of the development of higher education in the U.S., has necessity now become virtue? There are problems to be solved. Our society is rich enough to afford an even more complete search for talent.

## Section V

### The Effect of Federal Support on Allocation of Campus Resources

American Council on Education. *Higher Education and the Federal Government: Programs and Problems*. 45th Annual Meeting, Chicago, 1962. Washington, D. C.: American Council on Education, 1963. 116 pp.

The federal government and higher education up to the year 1962. Contains ten chapters written by Nathan M. Pusey, David D. Henry, and McGeorge Bundy. Pusey's chapter presents the *Carnegie Study of the Federal Government and Higher Education*. Five separate chapters deal with the question of campus resource allocation. McGeorge Bundy concludes that "American higher learning is more not less free and strong because of federal funds."

Arnold, Christian K. "Federal Support of Basic Research in Institutions of Higher Learning: A Critique," *Educational Record*, Vol. 45, No. 2 (Spring, 1964), pp. 199-203.

Primarily a discussion of the agency-to-individual grant/contract system of federal support for research, and an analysis of the report written under the auspices of the National Academy of Sciences entitled "Federal Support of Basic Research in Institutions of Higher Learning." The author suggests that although there are inherent dangers in this form of support for research, it is the best way at present, but the institutions must police themselves carefully. He also calls for alternatives to this policy.

\_\_\_\_\_. "Higher Education: Fourth Branch of Government?" *Saturday Review*, January 18, 1964, pp. 60-1+.

"The rather sudden growth of massive federal involvement in higher education since WWII has added an undigested new element to the relationship between universities and society. Our attempts so far to find solutions to these new problems have been engineering endeavors, not scientific ones. We have acted first and then tried to find rational justifications. Perhaps we ought to slow down long enough to take a look at where we are going before we find the path closed to alternate routes."

Baade, Hans W., Ed. *Academic Freedom: The Scholar's Place in Modern Society*. Dobbs Ferry, New York: Oceana Publishing, Inc., 1964. 217 pp.

Of the thirteen articles comprising this volume, three deal specifically with government involvement in some form and academic freedom.

"Academic Freedom and the Academic President" by Harold Dodels presents the view by a university president that this topic is relevant in all phases of university policy and "desirable, even indispensable." "Massive Subsidies and Academic Freedom" by Russell Kirk brings to light some revealing examples of how institutions have been compelled to sacrifice autonomy for less enduring but inviting alternatives. "The Implications of Research Funds for Academic Freedom" by Charles V. Kidd contends the partnership of institutions and government in meeting the increasing needs of higher education has been beneficial to both the academic community and to its freedom.

Babbidge, Homer D. and Robert M. Rosenzweig. *The Federal Interest in Higher Education*. New York: McGraw-Hill, 1962. 214 pp.

Describes the political and educational forces which formulate our government policy toward higher education. They state that political feasibility and expediency have been major determinants in such a policy and that federal programs are established not in the name of education but in the name of science, defense, etc. Book points up a chronic need for coordinating the policy and administration of government-higher education affairs.

Benson, Charles S. *The Cheerful Prospect*. Boston: Houghton Mifflin, 1965. 134 pp.

A general discussion of the need for a change toward equalization and coordination of our nation's public school programs. Although the book is primarily concerned with public schools at the elementary and secondary levels, it has some pertinent arguments about government and higher education. The consensus is that both local and state reform are needed at the administration levels in order to eliminate the "geographical inequality of education," and the "un-economical expenditure of funds."

\_\_\_\_\_. *The Economics of Public Education*. Boston, Mass.: Houghton Mifflin, 1961. 580 pp.

Analysis of the economics of education. The topic is dealt with as a sub-area of public finance and is basically an economics text. Under part two, "Sources of Public School Revenue," the total area of federal-state-local fiscal relations is discussed in detail. The text does not break the classification of education into sub-categories, but the problems of higher education are discussed.

Cagle, Fred. *Federal Research Projects and the Southern University*. Atlanta, Ga.: Southern Regional Education Board, 1962. 97 pp.

Book is based on published information, extensive correspondence, and interviews with administrators of federal programs, university faculty members, and others. Cagle is quite concerned about the limited number of institutions which share in the bulk of federally supported research along with the lack of interrelationships between federal agencies and universities. Suggestions made which might alleviate this are: consideration of regional needs and established

regional programs of research; "clearer policies and procedures for the interaction of government and universities"; and "the appointment of a liaison officer between the university and federal agencies."

Carnegie Foundation for the Advancement of Teaching. *The Study of the Federal Government and Higher Education*. New York: The Carnegie Foundation, 1962.

The results of this self-study by twenty-three institutions, as compiled by the foundation, form one of the first serious studies into the effect of federal support of higher education. Areas covered include: the federal interest in higher education; security, health, and scientific research; people and institutions; and issues and prospects. Includes appendices on the impact of federal tax policy on higher education and institutional self-study schedule as well as an annotated bibliography.

Daniere, Andre. *Higher Education in the American Economy*. New York: Random House, Inc., 1964. 203 pp.

Andre Daniere, a Harvard economist, has presented in this book the use of economic tools and principles in obtaining the goals of higher education. The theory of welfare economy, as it applies to higher education, is explained and discussed. The author feels the free market must remain "an operative device in the allocating of educational resources." He believes that a program of tuition loans to students would enable the institution to gain revenue while still leaving choices up to the student, and that such a program would provide public planning in higher education but yet private control of the institutions.

DeBurlo, C. Russell, Jr. "Government and Education," *Review of Educational Research*, Vol. XXXV, No. 4 (October, 1965), pp. 361-9.

Survey of studies and works recently completed in this field. Areas surveyed include: Federal, State, and Local Governmental Responsibility for Education; Goals of the Federal Government and Higher Education; Composition of the Federal Interest, and the Diversity of Higher Education; Legislative Process; Topical Breakdown and Analysis of Past and Present Government Support to Higher Education; The Effects of Federally Sponsored Research in Higher Education; and Future Relationship between Institutions of Higher Education and the Federal Government. Bibliography pp. 368-9.

DeVane, W. C. *Higher Education in Twentieth-Century America*. Boston, Mass.: Harvard University Press, 1965. 211 pp.

Chapter VI traces history of government involvement up to present and supplies reader with an articulated account of where government stands. Points out that control by agency is not the problem but rather whether or not institutions are profiting by present types of federal aid.

Dobbins, Charles G., Ed. *Higher Education and the Federal Government: Programs and Problems*. Papers presented at the 45th

**Annual Meeting, Chicago, October, 1962. Washington, D. C.:  
The American Council on Education, 1963. 127 pp.**

A broad coverage of the programs and problems involved in the relationship between higher education and the federal government. Includes remarks by both leaders of government and higher education which indicated at the time serious problems did exist but were the product of common concerns and could be solved. Select bibliography, pp. 117-26.

**Enarson, H. C. "Colleges with Sense of Direction Need not Fear Federal Dollars," *College and University Business*, Vol. 38, No. 6 (June, 1965), pp. 46-9.**

Article states that "federal pressures on colleges are intensive and probably inevitable, but the institution that is sure of its own goals has little to fear and much to gain from government involvement in higher education." Shows four ways in which federal dollars are opportunity dollars. Deals with questions of weakening institutional control and the policing of grants and contracts when federal aid is undertaken.

**Engelbert, Arthur F. "Short-term Grants and Long-range Goals: The Dilemma of Federal Policies," *Educational Record*, Vol. 44, No. 2 (April, 1963), pp. 161-4.**

The author describes some of the requisites necessary if governmental support of higher education is to be in the best interests of higher education. Support must be more broadly based across the entire range of institutions and at more levels than just doctoral.

**"Federal Tax Incentives for Higher Education," *Harvard Law Review*, Vol. 76 (1962), pp. 369-387.**

As an alternative to federal aid and thereby inevitable control, the author suggests a tax credit to those who donate to higher education. It is pointed out that a tax credit is subtracted from the amount of tax due, while a deduction comes from gross income. A review of present tax provisions with novel suggestions for the "treatment of appreciated property," tax relief for persons bearing educational expense, and "aid to student" are seen as attractive alternative measures to direct federal grants. He believes that such a method would put aid in forms less in private control and more open to public scrutiny.

**Fuller, Edgar. "Government Financing of Public and Private Education," *Phi Delta Kappan*, Vol. XLVII, No. 7 (March, 1966). pp. 365-372.**

This article questions how much public education programs will be damaged if private and sectarian institutions continue to use and gain additional federal tax funds for their support.

**Gardner, John W. *A.I.D. and the Universities*: Report to the Administrator of the Agency for International Development. Washington, D. C.: Agency for International Development, April, 1964. 51 pp.**

The author contends that there is a vital and impressive partnership between this and like agencies of the government, and higher education. Includes a description of the "University's Role in Technical Assistance"; "The A.I.D.-University Relationship"; "Participant Training"; "Research"; "University Contracts and Contract Administration"; "Personnel and Training"; and "Organization." Considering the present success and accomplishment of A.I.D., the author suggests that sometime in the near future, a semi-autonomous government institute be established to handle certain aspects of technical assistance—particularly relations with the universities. This, he contends, would enable greater long-term involvement in the combination of maximum operating efficiency with full accountability to government.

**Goheen, Robert F.** "Federal Financing and Princeton University," *Educational Record*, Vol. 44, No. 2 (April, 1963), pp. 168-80.

In describing the effects of federal support upon one institution, the author challenges the imbalance of support. However, he indicates that governmental programs must reflect public policy and that what is on trial is the American people's whole sense of organization, values, and purpose so that one of the principal jobs of educators is to bring the public to adequate awareness of the objectives, accomplishments, and requirements of higher education. Includes a list of Princeton's policies for sponsored research.

"A Guide to Federal Aid for Higher Education," *College Management* (December, 1965). 23 pp.

This pamphlet is published by the editors of *College Management*, a new magazine for college administrators which started publication in early 1966. Its purpose is to enable educators as well as state officials to become acquainted with the tremendous volume of education-oriented legislation enacted by Congress during 1965. The volume gives a short description of the various educational achievements and, more important, where inquiries can be sent in order to obtain additional material.

**Harrington, Fred Harvey.** "The Federal Government and the Future of Higher Education," *Educational Record*, Vol. 44, No. 2 (April, 1963), pp. 155-60.

Arguing that federal support is a necessary and good thing, the author indicates that institutions and individuals involved in higher education must now work separately and jointly to see to it that both needs of higher education and the public are met. He contends that the question of government involvement and support is a moot one but that the terms of that involvement must continually be solved jointly.

**Harris, Seymour E.** *Challenge and Change in American Education*. Berkeley, Calif. McCutchan Publishing Corporation, 1965. 346 pp.  
Second in a series of three books edited by Seymour Harris based

on the Seminars in American Education at Harvard University between 1958-1963. Three broad topics are presented: "Government and Education"; "Challenges in Educational Planning"; "Management of Colleges and Universities." The problems of multi-level governmental jurisdiction are presented by James E. Allen and Homer D. Babidge, Jr. in a chapter on "State vs. Federal Power in Education." While the volume contains commentaries by many educators, of special note are articles by: Robert Rosenzweig, Francis Keppel, Charles V. Kidd, and Andre Daniere.

\_\_\_\_\_. *Education and Public Policy*. Berkeley, Calif.: McCutchan Publishing Corp., 1965. 347 pp.

The third in the trilogy on the American Education Seminars held at Harvard University deals in length with the issues involved in the increasing role federal aid is playing in educational policy. Authors Logan Wilson, Vernon Alden, and James McCormack agree that the need for federal aid to higher education is evident but that the criteria and objectives used for allocating this aid are the basic areas of disagreement. Philip H. Coombs and David Riesman address themselves to the area of planning in higher education. The last portion of the work is on the economic issues involved in the role of government to education.

\_\_\_\_\_. *Higher Education: Resources and Finance*. New York: McGraw-Hill, 1962. 713 pp.

The economic issues facing higher education. The author defines and illustrates the nature of the problems and their various interrelationships. He includes 170 points by way of summary and emphasis which provide the casual reader with a concise overview of the issues. Areas covered include: cost trends; pricing; scholarships; loans; government contributions; the management of productive funds; costs and economies; and faculty. Includes bibliographical notes and index.

\_\_\_\_\_. *Higher Education in the United States: The Economic Problems*. Cambridge, Mass.: Harvard University Press, 1960. 247 pp.

This volume is the first of three books edited by Seymour Harris based upon Seminars on Higher Education held at Harvard University. It consists of papers written by different participants at the meetings and covers topics from "Pricing the Student Body" and "Government Aid" to "Economics and Educational Values." Of special note, with regard to government role in higher education, articles on "Federal and State Aid" by J. Paul Mather, and "Higher Education and the Federal Budget" by Richard A. Musgrove. Musgrove saw early in the federal interest in education the need for aid in the form of direct assistance to the operating costs of institutions.

Hollis, Ernest V. "Federal Aid for Higher Education," *Proceedings, 55th Annual Conference of the National Tax Association*, 1962. Harrisburg, Pa.: National Tax Association, 1963, pp. 482-92.

Author analyzes the history and present situation of federal aid, concluding that the imperative need to keep higher education solvent and expanding justifies a further federal investment in the enterprise. This equalizes educational opportunity among the states without damaging essential authority or responsibility.

Jencks, Christopher. "Education: What Next?" *The New Republic*, Vol. 153, No. 16 (October 16, 1965), pp. 21-3.

"The problem of transforming small schools is closely analogous to that which confronts the Office of Economic Opportunity in trying to promote 'community action' against poverty . . . . But when it was suggested that educational reformers would need similar powers, the Office of Education took the 'realistic' view that Congress and the National Education Association would never stand for it."

Keezer, Dexter M. *Financing Higher Education 1960-1970*. New York: McGraw-Hill, 1959. 304 pp.

This volume, the McGraw-Hill 50th anniversary study of the economics of higher education in the United States, includes a broad coverage of the economic issues facing higher education by many of the most noted scholars in the field. From a broad overview provided by Philip H. Coombs and Seymour E. Harris, the volume moves into specific issues, moving from the role of research to aspects of long-range planning to the role of private support. Of unusual interest is the chapter entitled "Outside the Conventional Structure," by Harold F. Clark.

Kerr, Clark. "The Realities of the Federal Grant University," *Educational Record*, Vol. 44, No. 2 (April, 1963), pp. 165-7.

The author contends that the partnership between the federal government and higher education has been very productive, but now it is time to seek a wider and deeper relationship aimed at developing more institutions and improving areas other than just the sciences. Both education and government will need a better-coordinated voice.

\_\_\_\_\_. *The Uses of the University: Godkin Lectures*. Cambridge, Mass.: Harvard University Press, 1963. 140 pp.

This noted contribution to higher education, written by the president of the conglomerate University of California, contains material on the actual effect of massive subsidies and a university's subsequent position when federal aid is given to it in any form. Of special interest is chapter two entitled "Federal Grant Universities."

Kidd, Charles V. *American Universities and Federal Research*. Cambridge, Mass.: The Belknap Press of Harvard University Press, 1959. 272 pp.

The author pursues the idea that large-scale federal financing of research has set in force irreversible trends that are affecting the nature of the universities, altering their capacities to teach, changing their financial status, modifying the character of part of the federal administrative structure, establishing new political relations, and changing the way research itself is organized. Believing these trends

are good, the author develops these points from the research goals of the federal agencies and the functions of the universities to university participation in federal decisions. Includes bibliographical notes and index.

\_\_\_\_\_. "The Implications of Research Funds for Academic Freedom," *Law and Contemporary Problems*, Vol. 28, No. 3 (Summer, 1963), pp. 613-624.

This article includes a discussion of "the effects on academic freedom of all outside funds for research . . . . The essential relationship of research support to academic freedom arises from the terms and conditions under which funds are provided and not from the source of the funds. To be explicit, the earmarking of university funds or state appropriations for research to be conducted under tightly drawn terms and conditions can pose the same threats to academic freedom as can research funds provided by the federal government or by the large foundations."

Kirk, R. "Massive Subsidies and Academic Freedom," *Law and Contemporary Problems*, Vol. 28, No. 3 (Summer, 1963), pp. 607-12.

Professor Kirk is more than critical of the infringement and eroding away of academic freedom which has taken place because of federal subsidies and grants to institutions of higher learning. He uses several anonymous case studies of universities to point out that "the preferences and value judgments of the administration of foundations and governmental agencies" are being carried out by indirect force. Douglas Knight, president of Duke University, and himself agree that centralization of existing government agencies is not the answer to the evident incoherence in federal aid. In general, he questions if a sacrifice in freedom is not too high a price to pay for governmental and foundational subsidies.

Knight, Douglas. *The Federal Government and Higher Education*. Englewood Cliffs, New Jersey: Prentice-Hall, 1960.

This book is a compilation of papers that were required background reading for the participants in the Seventeenth American Assembly, May 1960. It is a thorough source of information about the growing activities of the federal government in colleges and universities.

Little, Kenneth J. "Higher Education and the Federal Government," *Higher Education*, Vol. XX, No. 2 (October, 1963), pp. 3-6.

Compares findings of ten recent books. The author wonders if possibly the remarkable similarity in these books stems from the fact that fiscal policies of colleges and universities are a direct outgrowth of fiscal policies of the government rather than a genuine agreement with the role the government is presently playing in higher education. The author expresses concern that institutions are not keeping in mind that the basic responsibility of educational institutions is education and that programs of specialized service, research,

or other projects have their justification when they support the educational function.

\_\_\_\_\_. *A Survey of Federal Programs in Higher Education—Summary*. Office of Education, United States Department of Health, Education, and Welfare, Bulletin 1963, No. 5. Washington: Government Printing Office, 1962. 56 pp.

Describes the federal programs, participating institutions, and the effects of the programs on the institutions. The survey, while comprehensive and thorough, is slightly dated. Bibliography, pp. 52-6.

Maramaduke, Arthur S. "Can We Live with Federal Funds?" *College Board Review*, No. 59 (Spring, 1966), pp. 7-10.

This article deals with the threat of governmental control of this nation's colleges, especially in conjunction with the 600-700 million dollars in federal and state funds to become available to college students in the next three years.

Monill, James L. *The Ongoing State University*. Minneapolis, Minn.: University of Minnesota Press, 1960. 137 pp.

As past president of one of our nation's largest universities, the University of Minnesota, the author traces the development of the land-grant institution to its present position as a "catalyst" of state initiative and investment in educational opportunity and research. Chapters on "Higher Education and Federal Government" and "The Responsibility of the State to its University" deal with a large university's problems and alternatives in meeting a period of unusual challenge in our nation's history.

Moore, Raymond E. "The Federal Government's Role in Higher Education," *Economics of Higher Education*. Office of Education, United States Department of Health, Education, and Welfare. Washington: Government Printing Office, 1962. pp. 202-218.

The author in a brief but complete manner covers the history and extent of federal support to higher education. Assuming aid is needed, we must decide whether states and institutions or students are to be the direct recipients. The problem of allocation among the various institutions and students is the other major issue to be resolved. In conclusion the author suggests that direct governmental expenditures and scholarships are superior to tax changes and loans. This article concisely presents an excellent picture of the issues which face government and education in the sixties.

\_\_\_\_ and D. W. Field. "Higher Education Facilities Act: A Status Report," *Phi Delta Kappan*, Vol. 46, No. 6 (February, 1965), pp. 277-9.

Moore and Field, both officials in the Bureau of Higher Education, have written a very informative and descriptive article on the Higher Education Facilities Act of 1963. By tracing our nation's past need for such a bill the authors point out its significance and effect on

higher education. Statistical information and illustrative comparisons between various states and institutions give the article a very comprehensive outlook. The authors conclude that in enacting this legislation, Congress has shown a strong and abiding confidence in the ability of American higher education institutions to frame reasonable financial programs.

Muirhead, Peter P. "Federal Interest in Education," *College & University*, Vol. 39, No. 4 (Summer, 1964), 433 pp.

Muirhead of the U. S. Office of Education in this address discusses how federal resources can be utilized to enable universities to do a better job of educating. He establishes the theme that federal control is a myth and that we should begin to think of the federal government as belonging as much to our citizens as do their local and state government. He concludes that a utilization of our national resources must be achieved while protecting the local foundations and controls of our schools.

Munster, Joseph H., Jr. and Justin C. Smith. "The University in the Market Place," *Journal of Higher Education*, Vol. XXXV, No. 8 (November, 1964), pp. 417-425.

A warning to all institutions seeking to work with the federal government to realize that they are actually dealing with the federal government, and that each agency is likely to have its own policy with respect to costs, patents, security, and so on. Also, the institutions should know their own policies with respect to recurring problems in order that individual department heads may take the initiative in negotiating certain concessions from the various supporting agencies.

Mushkin, Selma J., Ed. *Economics of Higher Education*. Office of Education, United States Department of Health, Education, and Welfare. Washington: Government Printing Office, 1962. 406 pp.

A number of eminent economists discuss the range of economic problems on which initial research has been accomplished and its implications to higher education, and suggest many areas where additional research is needed. Areas specifically covered include: College-Trained Personnel: Supply and Demand; Higher Education as an Investment in People; Financial Resources for Higher Education; and Economic Research in Higher Education. Introduction by Homer D. Babbidge, Jr. Includes bibliographical notes with each article and various appendices.

\_\_\_\_ and Eugene P. McLoone. *Public Spending for Higher Education in 1970*. Chicago, Ill.: Council of State Governments, February, 1965. 68 pp.

As part of Project '70', a series of studies of state revenues and expenditures projected to 1970, this publication is concerned with questions raised if higher education needs are to be met in 1970. Contending that this is probably the fastest growing area of state expenditures during the coming five years, the authors look at present

figures and, assuming certain economic and demographic conditions, project the necessities of 1970, and the amount of additional tax support required. Includes appendices showing statistics on a state-by-state breakdown.

National Academy of Sciences. *Basic Research and National Goals*: A Report to the Committee on Science and Astronautics, U. S. House of Representatives. Washington: Government Printing Office, March, 1965. 366 pp.

Composed of a series of articles by leading academicians and scholars, this volume sought to answer two broad questions presented by the House Committee on Science and Astronautics: (1) What level of federal support is needed to maintain for the United States a position of leadership through basic research in the advancement of science and technology and their economic, cultural, and military applications? and (2) What judgment can be reached on the balance of support now being given by the federal government to various fields of scientific endeavor, and on adjustments that should be considered, either within existing levels of support or under conditions of increased or decreased over-all support?

Orlans, Harold. *The Effects of Federal Programs on Higher Education*. Washington, D. C.: The Brookings Institution, 1962. 353 pp.

By discussing specific grants and aid programs the author arrives at three major conclusions: Federal programs have been increasingly concentrated in the sciences at large major universities while not diversifying its impact. Such a trend has had beneficial results in the sciences at the sacrifice of the social sciences and humanities. The second area of concern is over the moot question of "should funds be more widely dispersed?" In his last chapter, "Federal Control," the author suggests that institutions in order to maintain autonomy and independence should creatively determine their policy with regard to specific programs and presume these objectives at all costs.

\_\_\_\_\_. "Federal Expenditures and the Quality of Education," *Science*, Vol. 142, No. 3600 (December 27, 1963), pp. 1625-29.

"What, since WWII, has been the relation of federal expenditures to the quality of higher educational institutions, of instruction, and of research, and what changes, if any, should be made in the present pattern of expenditures? Mr. Orlans' conclusions are drawn mainly from a study of the effects of federal programs on departments of science, social science, and the humanities at 36 universities and colleges, undertaken by the Brookings Institution for the U. S. Office of Education.

Price, Don K. "Federal Money and University Research," *Science*, Vol. 151, No. 3708 (January 21, 1966), pp. 285-90.

"It would be naive to assume the present volume of government grants to universities for theoretical science could have been stimulated solely by a zeal for pure learning on the part of administrators

or congressmen. The mixed motives that have led to this tremendous volume of appropriations are likely to lead to difficulties in the long run." The author goes on to discuss the problems likely to arise in the future and the dangers inherent in projections based on past experiences.

Rivlin, Alice M. *The Role of the Federal Government in Financing Higher Education*. Washington, D. C.: Brookings Institution, 1961. 179 pp.

Provides the reader with a background of the federal government's role in financing higher education by outlining the history of federal programs and pointing out the principal issues. Specific outlines are suggested on which a federal program might operate for aid to both student and institution.

Sudermann, Frederick. *Federal Programs Affecting Higher Education: An Administrative Reference Manual*. Iowa City, Iowa: Inst. of Public Affairs, Division of Special Services, State University of Iowa, 1962. 775 pp.

This manual which is distributed by the American Council on Education is an exhaustive source of administrative and descriptive information on federal programs of all kinds. It serves the purpose of enabling institutions of higher education to become better acquainted with the opportunities available to them through government programs. The volume covers federal programs in the form of grants and loans for research, equipment, facilities, fellowships, traineeships, and scholarships.

Sufrin, Sidney C. *Administering the National Defense Education Act*. Syracuse, New York: Syracuse University Press, 1963. 76 pp.

In this book Professor Sufrin has attempted to alleviate and effectively avert many of the problems of coordinating local, state, and federal levels of government in accomplishing the purposes of the NDEA. In doing this the author has written a very scholarly text which identifies the issues involved in the NDEA and the total of federal aid for higher education. He discusses such topics as "Power—Laws and Extent" and the idea of "categorical and general aid." While a great deal of the emphasis is on secondary and elementary education, the topic of higher education is interwoven in the analysis.

"Twenty-six Campuses and the Federal Government," *Educational Record*, Vol. 44, No. 2 (April, 1963), pp. 95-136.

This article provides a well-defined summary of data collected in a survey of the effect of federal funds on higher education, undertaken by the Carnegie Foundation for the Advancement of Teaching. Results did indicate that federal support of research exerted the greatest influence upon the participating institutions. Most institutions participating also felt that the force of the federal dollar was directed at immediate needs nationally and that programs should consider the long-range growth and improvement of higher education.

United States Congress, House Committee on Education and Labor. *The Federal Government and Education*. 88th Congress, 1st Session. House Document No. 159. Washington: Government Printing Office, 1963. 178 pp.

A study of all the educational programs which the government was involved in at that time. As submitted by Edith Green, chairman of the Special Subcommittee on Education, this document includes an analysis of the following: executive jurisdiction over educational programs; congressional jurisdiction over education legislation; facilities and equipment; support of students; support of teachers; curriculum strengthening; research in colleges and universities; federal institutions of higher education; federally impacted programs in international education; and a summary of education expenditures. Study includes several supplements to text, a selected bibliography, and index.

\_\_\_\_\_, House Committee on Government Operations, Subcommittee on Research and Programs. *Conflicts between the Federal Research Programs and the Nation's Goals for Higher Education*. 89th Congress, 1st Session. Washington: Government Printing Office, 1965. 114 pp.

This publication provides a valuable look at this pressing question. It is made up of the responses of the academic and other interested communities to an inquiry by Congress. Includes excerpts and replies from some of the 300 persons polled. Questions asked included the students, faculty, institutions, graduates, and the government.

Wesco, W. C. "Expansion and Excellence. A Choice in Higher Education?", *State Government*, Vol. 37 (1964), pp. 221-227. In this article the author deals with two problems in higher education which have large implications for state finance and educational planning, as well as distribution of national research funds: (1) Enrollments will continue to mount rapidly, reaching into the postgraduate levels; (2) educational excellence must be maintained; expansion must not dilute quality.

Wilson, Logan, Ed. *Emerging Patterns in American Higher Education*. A collection of essays. Washington, D. C.: American Council on Education, 1965. 292 pp.

This volume of essays is contributed by the nation's leading educators and scholars; it is a comprehensive overview of American higher education today. Directed primarily at organization and direction, it covers: the changing environment of higher education; institutional modifications; the emergence of state systems; voluntary arrangements; interinstitutional and interstate agreements; unified approaches to national problems; national associations in higher education; and national policy for higher education: problems and prospects. Primary emphasis is toward the emergence of a stronger national higher educational policy.

\_\_\_\_\_. "A Better Partnership for the Federal Government and Higher Education," *Educational Record*, Vol. 44, No. 2 (April, 1963), pp. 137-144.

Contending that the growing interdependence between government and higher education calls for an unending assessment of the partnership, the author calls for a greater effort by institutions and organizations of higher education to address themselves to the nature and growth of this partnership. He cites the efforts being made by the American Council on Education.